# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Docket No. 138065UL (MHM 15115US01))

In the Application of:

Mathew

Electronically Filed on July 30, 2007

Serial No.:

10/681,634

Filed:

October 8, 2003

For:

BIOMETRICALLY ENABLED

IMAGING SYSTEM

Art Unit:

3737

Examiner:

Ramirez, John Fernando

Confirmation No. 6101

### APPEAL BRIEF

Mail Stop Appeal Brief – Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

The Applicant respectfully requests that the Board of Patent Appeals and Interferences reverse the final rejection of claims 1, 4-10, 13-14 and 16-27 of the present application. This Appeal Brief is timely because it is being filed within one month of the July 11, 2007 mailing date of the Notice of Panel Decision from Pre-Appeal Brief Review.

### **REAL PARTY IN INTEREST**

(37 C.F.R. § 41.37(c)(1)(i))

The real party in interest is G.E. Medical Systems Global Technology Co., assignee of the present application, having a place of business at 3000 North Grandview Boulevard, Waukesha, Wisconsin 53188.

## RELATED APPEALS AND INTERFERENCES

(37 C.F.R. § 41.37(c)(1)(ii))

Not Applicable.

## STATUS OF THE CLAIMS

(37 C.F.R. § 41.37(c)(1)(iii))

The present application includes pending claims 1, 4-10, 13-14 and 16-27, all of which remain rejected. Claims 2-3, 11-12 and 15 were canceled without prejudice or disclaimer.<sup>1</sup> The Applicant identifies claims 1, 4-10, 13-14 and 16-27 as the claims that are being appealed. The text of the pending claims is provided in the Claims Appendix.

### STATUS OF AMENDMENTS

 $(37 \text{ C.F.R.} \S 41.37(c)(1)(iv))$ 

Subsequent to the final rejection of the claims mailed February 21, 2007, the Applicant filed an Amendment Under 37 C.F.R. § 1.116.<sup>2</sup> The Applicant amended claims 1 and 10 subsequent to the final rejection.<sup>3</sup> The claim amendments do not, however, raise any new issues because they represent previously pending dependent claims that are incorporated into the text of

<sup>&</sup>lt;sup>1</sup> See March 20, 2007 Amendment Under 37 C.F.R. § 1.116.

<sup>&</sup>lt;sup>2</sup> See id.

<sup>&</sup>lt;sup>3</sup> See id.

pending independent claims 1 and 10.<sup>4</sup> In particular, claim 1 has been amended to recite all the limitations of previously pending claim 3 (which depended from claim 2, which, in turn, depended from claim 1), while claim 10 has been amended to recite all the limitations of previously depending claim 15 (which depended from claim 12, which, in turn depended from claim 11, which, in turn depended from claim 10). Claims 2, 3, 11, 12 and 15 were all previously examined.<sup>5</sup> Thus, the claim amendments do not raise any new issue.

# SUMMARY OF CLAIMED SUBJECT MATTER (37 C.F.R. § 41.37(c)(1)(v))

## Independent claim 1 recites the following:

An imaging system<sup>6</sup> comprising:

a central processing unit;<sup>7</sup>

a data storage unit in communication with said central processing unit;8

an imaging device in electrical communication with said central processing unit;9 and

a biometric authorization unit in electrical communication with said central processing unit, 10 wherein a user inputs a biometric identifier into said biometric authorization unit in order

<sup>&</sup>lt;sup>4</sup> See March 20, 2007 Amendment at pages 9, and *compare*, e.g., previously pending claims 2 and 3 at page 2 of November 14, 2006 Amendment with claim 1 at page 2 of March 20, 2007 Amendment.

<sup>&</sup>lt;sup>5</sup> See, e.g., February 21, 2007 Office Action.

<sup>&</sup>lt;sup>6</sup> See present application, e.g., at page 3, lines 1-2, page 7, lines 4-22 and Figure 1, reference numeral 10.

<sup>&</sup>lt;sup>7</sup> See id., e.g., at page 3, lines 1-2, page 7, lines 4-10 and Figure 1, reference numeral 14.

<sup>&</sup>lt;sup>8</sup> See id., e.g., at page 3, lines 1-2, page 7, lines 4-10 and Figure 1, reference numeral 14.

<sup>&</sup>lt;sup>9</sup> See id., e.g., at page 3, lines 3-4, page 8, line 16 to page 12, line 14, Figure 3, reference numeral 11, Figure 4, reference numeral 42, Figure 5, reference numeral 84 and Figure 6, reference numeral 100.

<sup>&</sup>lt;sup>10</sup> See id., e.g., at page 3, lines 5-6, page 7, lines 5-8, page 8, lines 1-15, Figure 1, reference numeral 20, Figure 4, reference numeral 20 and Figure 5, reference numeral 82.

to enable imaging use of the imaging system,<sup>11</sup> wherein biometric data extracted from the biometric identifier is compared with stored biometric data in said data storage unit,<sup>12</sup> wherein the stored biometric data is associated with stored personal identification information,<sup>13</sup> wherein the stored biometric data and the stored personal identification information are stored after an initial registration,<sup>14</sup> and wherein user preference information is associated with the stored biometric data and with the personal identification information.<sup>15</sup>

## Independent claim 10 recites the following:

A medical imaging network<sup>16</sup> comprising a plurality of medical imaging systems<sup>17</sup> in communication with one another,<sup>18</sup> each of said medical imaging systems comprising:

a medical imaging device; 19 and

a biometric authorization unit,<sup>20</sup> wherein a user inputs a biometric identifier into said biometric authorization unit in order to use the medical imaging device to image a patient;<sup>21</sup> and

a central management station in communication with each of said plurality of medical imaging systems, <sup>22</sup> wherein biometric data extracted from the biometric identifier is stored in at

<sup>&</sup>lt;sup>11</sup> See id., e.g., at page 3, lines 6-8.

<sup>&</sup>lt;sup>12</sup> See id., e.g., at page 3, lines 8-10, page 8, lines 3-9 and page 14, lines 1-10.

<sup>&</sup>lt;sup>13</sup> See id., e.g., at page 3, lines 10-12 and page 14, lines 1-10.

<sup>&</sup>lt;sup>14</sup> See id., e.g., at page 12, lines 5-22, page 13, lines 1-11 and page 14, lines 11-21.

<sup>&</sup>lt;sup>15</sup> See id., e.g., at page 3, lines 12-14, page 13, lines 12-22 and page 14, lines 1-10.

<sup>&</sup>lt;sup>16</sup> See id., e.g., at Figure 5, reference numeral 72.

<sup>&</sup>lt;sup>17</sup> See id., e.g., at Figure 5, reference numeral 74.

<sup>18</sup> See id., e.g., at page 4, lines 6-8, page 15, line 8 to page 16, line 12.

<sup>&</sup>lt;sup>19</sup> See id., e.g., at page 3, lines 3-4, page 8, line 16 to page 12, line 14, Figure 3, reference numeral 11, Figure 4, reference numeral 42, Figure 5, reference numeral 84 and Figure 6, reference numeral 100.

<sup>&</sup>lt;sup>20</sup> See id., e.g., at page 3, lines 5-6, page 7, lines 5-8, page 8, lines 1-15, Figure 1, reference numeral 20, Figure 4, reference numeral 20 and Figure 5, reference numeral 82.

<sup>&</sup>lt;sup>21</sup> See id., e.g., at page 3, lines 6-8.

<sup>&</sup>lt;sup>22</sup> See id., e.g., at page 4, lines 8-9, page 15, lines 8-20 and Figure 5, reference numeral 76.

least one of a central data storage unit in said central management station and individual data storage units in said plurality of imaging systems, <sup>23</sup> wherein personal identification information and user preference information is associated with the stored biometric data. <sup>24</sup>

## Independent claim 19 recites the following:

A method of using a medical imaging system.<sup>25</sup> comprising: registering to use the medical imaging system.<sup>26</sup> said registering comprising:

- (i) inputting a biometric identifier into a biometric authorization unit;<sup>27</sup>
- (ii) inputting personal information into the medical imaging system;<sup>28</sup> and
- (iii) associating biometric data extracted from the biometric identifier with the personal information;<sup>29</sup> and

storing the biometric data and associated personal information;<sup>30</sup>

enabling imaging use of the medical imaging system when biometric data input at the biometric authorization unit matches stored biometric data.<sup>31</sup>

# Independent claim 24 recites the following:

A method of using audio/video equipment<sup>32</sup> comprising:

registering to use the audio/video equipment by inputting biometric data;<sup>33</sup>

<sup>&</sup>lt;sup>23</sup> See id., e.g., at page 4, lines 8-12, page 15, lines 8-20.

<sup>&</sup>lt;sup>24</sup> See id., e.g., at page 3, lines 12-14, page 12, lines 5-22, page 13, lines 12-22, page 13, lines 1-22 and page 14, lines 1-21.

<sup>&</sup>lt;sup>25</sup> See id., e.g., at page 4, lines 13-14.

<sup>&</sup>lt;sup>26</sup> See id., e.g., at page 4, lines 13-14.

<sup>&</sup>lt;sup>27</sup> See id., e.g., at page 4, lines 17-18 and Figure 7, reference numeral 122. .

<sup>&</sup>lt;sup>28</sup> See id., e.g., at page 4, lines 18-19 and Figure 7, reference numeral 124. .

<sup>&</sup>lt;sup>29</sup> See id., e.g., at page 4, lines 19-20 and Figure 7, reference numeral 126. .

<sup>&</sup>lt;sup>30</sup> See id., e.g., at page 4, lines 14-15.

<sup>31</sup> See id. at page 4, lines 15-17.

<sup>&</sup>lt;sup>32</sup> See id. at page 5, lines 1-8 and page 18, lines 10-21.

<sup>&</sup>lt;sup>33</sup> *See id.* at page 5, lines 2-3.

storing the biometric data;<sup>34</sup> and

enabling audio/video use of the audio/video equipment when biometric data input after said registering matches the stored biometric data.<sup>35</sup>

## GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

 $(37 \text{ C.F.R.} \S 41.37(c)(1)(vi))$ 

Claims 1, 4, 6, 8-12, 16, 18, 19 and 23 stood rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 6,129,671 ("Hastings"). Claims 24 and 27 stood rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 6,587,830 ("Singer"). Claims 2-3, 5, 7, 13-15, 17, 20-22 and 25-26 stood rejected under 35 U.S.C. 103(a) as being unpatentable over Hastings in view of United States Patent No. 5,930,804 ("Yu"), United States Patent No. 6,260,021 ("Wong") and United States Patent No. 5,315,999 ("Kinicki").

Because claim 1 was amended to recite all the limitations of previously pending claims 2 and 3, and claim 10 was amended to recite all the limitations of previously pending claims 11, 12 and 15, the Applicant submits that the grounds of rejection to be reviewed on appeal are now as follows: Claims 19 and 23 stand rejected under 35 U.S.C. 102(b) as being anticipated by Hastings. Claims 24 and 27 stand rejected under 35 U.S.C. 102(b) as being anticipated by Singer. Claims 1, 4-10, 13-14, 18, 20-22 and 25-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hastings in view of Yu, Wong and Kinicki.

<sup>&</sup>lt;sup>34</sup> See id. at page 5, line 3.

 $<sup>^{35}</sup>$  See id. at page 5, lines 3-4.

# ARGUMENT (37 C.F.R. § 41.37(c)(1)(vii))

With respect to claims 19 and 23, the Applicant respectfully submits that Hastings does not describe, teach or suggest "registering to use the medical imaging system, said registering comprising: (i) inputting a biometric identifier into a biometric authorization unit; (ii) inputting personal information into the medical imaging system; and (iii) associating biometric data extracted from the biometric identifier with the personal information." Thus, Hastings does not anticipate claims 19 and 23.

With respect to claims 24 and 27, Singer does not describe, teach or suggest "registering to use the audio/video equipment by inputting biometric data; ... and enabling audio/video use of the audio/video equipment when biometric data input after said registering matches the stored biometric data." Thus, Singer does not anticipate claim 24 or the claims that depend therefrom.

With respect to claims 1, 4-10, 13-14, 18 and 20-22, none of Hastings, Yu, Wong or Kinicki teaches or suggests "wherein user preference information is associated with the stored biometric data and with the personal identification information," as recited in claim 1, or "wherein personal identification information and user preference information is associated with the stored biometric data," as recited in claim 10. Thus, the proposed combination does not render claims 1, 4-10, 13-14, 19 and 20-22 unpatentable.

### I. Hastings Does Not Anticipate Claims 19 And 23

The Applicant first turns to the rejection of claims 19 and 23 as being anticipated by Hastings. "A claim is anticipated only if **each and every element** as set forth in the claim is found, either expressly or inherently described, in **a single prior art reference**." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)

(emphasis added). "The **identical** invention must be shown in as complete detail as is contained in ... the claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

Claim 19 recites, in part, "registering to use the medial imaging system, said registering comprising: (i) inputting a biometric identifier into a biometric authorization unit; (ii) inputting personal information into the medical imaging system; and (iii) associating biometric data extracted from the biometric identifier with the personal information."

Hastings discloses an "ultrasound imaging system and ultrasound review station with a biophysical detector." *See* Hastings at Abstract. To gain access to an ultrasound imaging system or review station, a user provides a biophysical input.

Once the biophysical input is detected (step 210), the biophysical input is transformed into a computer-usable form (step 220) and sent to the **recognition server** 120 for analysis (step 230). . . . The recognition server can use the reflections to form an image of the user's fingerprint and can compare this image (or calculations based on this image) to those of authorized users. If the fingerprint is recognized (step 240), the biophysical detector 110 provides authorization information to the ultrasound imaging system or ultrasound review station to grant access to the user (step 260). If the fingerprint is not recognized, the user is denied access (step 250).

*Id.* at column 2, lines 24-39 (emphasis added). Hastings further describes the "recognition server" as follows:

For simplicity, the term "recognition server" is used in the specification and claims to broadly refer to the hardware and/or software components that are used to analyze a signal representative of a user's biophysical attribute to determine whether the user is authorized to gain access to an ultrasound imaging system or ultrasound review station.

Id. at column 3, lines 6-11.

In short, Hastings discloses a system in which a biophysical input, such as a fingerprint, detected by a device is compared with stored biophysical inputs of authorized users within a database. That is, the system of Hastings stores biophysical data within a database. A biophysical input is then compared with respect to that database.

Hastings does not describe, teach or suggest, however, "registering to use the medial imaging system, said registering comprising: (i) inputting a biometric identifier into a biometric authorization unit; (ii) inputting personal information into the medical imaging system; and (iii) associating biometric data extracted from the biometric identifier with the personal information," as recited in claim 19. Instead, as shown above, Hastings merely stores biophysical data within a database, and biophysical inputs are compared with respect to that database. There is nothing in Hastings that describes, teaches or suggests associating biometric data extracted from the biometric identifier with personal information. Hastings does not describe, teach or suggest associating personal information of a user with stored biophysical data. Nor has the Office Action attempted to point out where in Hastings such limitations are found. See February 21, 2007 Office Action at pages 2-3. Thus, for at least these reasons, the Applicant respectfully submits that Hastings does not anticipate claims 19 and 23.

# II. Singer Does Not Anticipate Claims 24 And 27

The Applicant next turns to the rejection of claims 24 and 27 as being anticipated by Singer.

## A. Singer Does Not Anticipate Independent Claim 24

Claim 24 recites, in part, "registering to use the audio/video equipment by inputting biometric data;... and enabling audio/video use of the audio/video equipment when biometric data input after said registering matches the stored biometric data."

Singer relates to "the medial office automation industry and more particularly to the field of forming medical records in the medical industry." Singer at column 1, lines 14-16. In particular, Singer discloses an "apparatus and method for forming a medical record which does not require a separate transcriptionist for transcribing a dictated medical record." *Id.* at column 2, lines 35-38. The apparatus and method of Singer "recognizes key medical words or terms in the free, unprompted, and unstructured dictation so that relationships can be made between the medical terms." *Id.* at column 2, lines 50-55.

Singer also discloses a medical term matching means that includes "a knowledge database relating patient conditions with patient treatments of the conditions so that the knowledge base assists in further describing at least the actual condition and/or treatment of the patient by adding additional data, e.g., a more complete description, to a medical form which is or will be created." *Id.* at column 3, lines 18-24.

Singer, in short, discloses an apparatus and method that "key[s] off of key medical terms used by a physician or other medial personnel such as in free, unprompted, and unstructured dictation..." in order to "provide freedom for the physician to talk, speak, and dictate according to the physician's personal preferences, style, language, vocabulary, tone, and other desires when forming a medical record." *Id.* at column 3, lines 48-54.

While Singer discloses "biometric identifiers," Singer does not describe, teach or suggest that such biometric identifiers are used with respect to "registering to use the audio/video

equipment," or "enabling audio/video use of the audio/video equipment when biometric data input after said registering matches the stored biometric data." Instead, Singer discloses a system in which such identifier may be used to "reference previous terms or patterns from previous dictations to the apparatus by the identified medical personnel," as shown below:

The voice processing means 20 also can advantageously include speech term learning means, e.g., a speech learner 24 such as formed in software and/or hardware as understood by those skilled in the art, for learning speech terms used by identified medical personnel and/or speech pattern learning means, e.g., a pattern learner 26 such as formed in software and/or hardware as understood by those skilled in the art, for learning speech patterns used by identified medical personnel. To perform these functions, for example, the apparatus 10 can also include biometric identifying means 27 connected to the voice processing means 20 for identifying biometric data from medical personnel to thereby reference previous terms or patterns from previous dictations to the apparatus by the identified medical personnel. As understood by those skilled in the art, the biometric identifying means is preferably a voice identification pattern, tone, or other voice identifier 27. Other biometric identifiers, however, such as fingerprint characteristics. eye characteristics, skin characteristics, body fluid characteristics, or other user characteristics can be used as well according to the present invention.

*Id.* at column 7, lines 3-23 (emphasis added). As shown above, Singer discloses "biometric identifying means," but such means are only used "for learning speech terms used by identified medical personal and/or speech pattern learning means."

Singer does not describe, teach, or suggest, however, "registering to use the audio/video equipment by inputting biometric data;... and enabling audio/video use of the audio/video equipment when biometric data input after said registering matches the stored biometric data," such as recited in claim 24. Thus, for at least these reasons, Singer does not anticipate claims 24 and 27.

# B. Singer Does Not Anticipate Claim 27

Claim 27 should be in condition for allowance for at least the reasons discussed above. Additionally, the Office Action cites column 6, lines 8-34 of Singer as support for "wherein the audio/video equipment is one of a television, camera, CD player, DVD player, and car stereo." See February 21, 2007 Office Action at page 5. This portion of Singer, however, states the following:

FIGS. 1-2 illustrate an apparatus 10 for forming and storing medical records 15 (see, e.g., FIG. 4) according to the present invention which preferably uses a combination of hardware elements and software programs and/or databases for forming the apparatus. The medical record forming and storing apparatus 10 preferably includes voice inputting means, e.g., preferably provided by a voice recorder 12, for inputting the unprompted and unstructured free dictation of at least one medical personnel such as a physician, and voice processing means, e.g., preferably provided by a voice processor or voice data processor 20 such as one or more microprocessors, microcontrollers, digital processing devices or circuits, software processors, computer voice recognition software, or other data processors as understood by those skilled in the art, responsive to the voice inputting means 12 for processing the freely dictated voice from the voice inputting means 12 and generating voice data therefrom. As understood by those skilled in the art, the voice recorder 12, for example, can be any of various types of audio tape, digital media recorders, direct dictation into a software program, or other voice input devices such as produced by companies such as Dictaphone, Lanier, Pitney Bowes, IBM, Microsoft, Dragon Systems, or Kurzwell Applied Intelligence. The voice processor 20 preferably includes at least one microprocessor having stored commands for processing data and/or other hardware and software as understood by those skilled in the art.

*Id.* at column 6, lines 8-34 (emphasis added). As shown above, the cited portion of Singer merely discloses examples of "voice recorders," but does not describe, teach, or suggest a "television, camera, CD player, DVD player, and car stereo." Thus, for at least this additional reason, Singer does not anticipate claim 27.

# III. The Proposed Combination Of References Does Not Render Claims 1, 4-10, 13-14, 18, 20- 22 And 25-26 Unpatentable

The Applicant now turns to the rejection of claims 1, 4-10, 13-14, 18, 20-22, and 25-26 as being unpatentable over Hastings in view of Yu, Wong, and Kinicki. Claim 1 recites "wherein biometric data extracted from the biometric identifier is compared with stored biometric data in said data storage unit, wherein the stored biometric data is associated with stored personal identification information, wherein the stored biometric data and the stored personal identification information are stored after an initial registration, and wherein user preference information." Claim 10 recites "a central management station in communication with each of said plurality of medical imaging systems, wherein biometric data extracted from the biometric identifier is stored in at least one of a central data storage unit in said central management station and individual data storage units in said plurality of imaging systems, wherein personal identification information and user preference information is associated with the stored biometric data." The Office Action acknowledges that Hastings does not teach or suggest these limitations. See February 21, 2007 Office Action at pages 5-6.

## A. Yu Does Not Overcome The Deficiencies Of Hastings

The Office Action cites column 10, lines 1-60 of Yu as disclosing "storing individual imaging preferences for the medical imaging system as user preference information and associating the user preference information...." *See id.* at page 7.

Yu, however, "relates to biometric authentication, particularly to systems and methods for biometric authentication of individuals involved in transactions **employing the World Wide**Web." See Yu at column 1, lines 5-8 (emphasis added). Yu does not teach or suggest "medical

imaging" in general. Therefore, Yu does not overcome the deficiency of Hastings. That is, neither Hastings, nor Yu, teaches or suggests "storing individual imaging preferences for the medical imaging system as user preference information and associating the user preference information...." Nor is there anything in column 10, lines 1-60 of Yu that is relevant to individual imaging preferences for a medical imaging system. See Yu at column 10, lines 1-60.

## B. Kinicki Does Not Overcome the Deficiencies Of Hastings And Yu

The Office Action also cites Kinicki as disclosing "storing individual imaging preferences for the medical imaging system as user preference information and associating the user preference information." See February 21, 2007 Office Action at page 8. Claim 1 recites, however, "wherein user preference information is associated with the stored biometric data and with the personal identification information." Kinicki does not teach or suggest associating user preference information with stored biometric data and personal identification information. Instead, Kinicki discloses a system that "can store a plurality of preset modes for different exam types, for different image displays, for different patients and for different users." See Kinicki at column 3, lines 35-38. The preset modes are stored on the computer and a user selects them via an interface. See id. at column 6, lines 40-43 ("Initially, the operator selects an exam type and preset mode and adjusts the imaging parameter values to obtain a desired image on the display screen 14."). While a user may configure personal preset modes, there is nothing in Kinicki that discloses that such personal preset modes are ever associated with biometric data.

None of Hastings, Yu, Wong, or Kinicki, alone or in combination with one another, teaches or suggests "wherein user preference information is associated with the stored biometric data and with the personal identification information," as recited in claim 1, or "wherein personal identification information and user preference information is associated with

the stored biometric data," as recited in claim 10, as amended. Thus, for at least these reasons, the proposed combination of references does not render claims 1, 4-10, 13-14, 18 and 20-22 unpatentable.

Additionally, the Office Action has not established a prima facie case of obviousness with respect to claims 25-26 for at least the reasons discussed above with respect to claims 24.

# C. The Proposed Combination Of References Does Not Render Claim 21 Unpatentable For An Additional Reason

Additionally, the Office Action has not shown where any of the references disclose "allowing said registering step by inputting a password," as recited in claim 21. See February 21, 2007 Office Action at page 7. Thus, for at least this reason, the Office Action has not established a prima facie case of obviousness with respect to claim 21. Indeed, claim 21 should be in condition for allowance.

# D. The Office Action Does Not Articulate A Proper Motivation To Combine

Further, the Office Action does not articulate a proper motivation to combine the references. The Supreme Court's decision in KSR International v. Teleflex notwithstanding, "in formulating a rejection under 35 U.S.C. § 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed." See May 3, 2007 Memo from Margaret A. Focarino to Technology Center Directors.

In terms of a motivation to combine, the Office Action makes a blanket generalization that is intended to sweep in all of the recited limitations of claims 1, 4-10, 13-14, 19, 20-22 and 25-26.

Based on the above observations, for a person of ordinary skill in the art, modifying the system disclosed by Hastings, with the above discussed enhancements would have been considered obvious because such modifications would provide a safer and faster method to biometric authentication of individuals seeking access to medical image workstations.

See February 21, 2007 Office Action at page 8. The Office Action does not address each separate claim. Instead, the Office Action merely makes an overly broad statement that there is a motivation to combine the **four** separate and distinct references to render the claims obvious because of the "above discussed enhancements."

Merely identifying isolated elements in the prior art is not enough to establish a *prima* facie case of obviousness:

[M]ere identification in the prior art of each element is insufficient to defeat the patentability of the combined subject matter as a whole. [In re Rouffet, 149 F. 3d 1350] at 1355, 1357 [(Fed. Cir. 1998)]. Rather, to establish a prima facie case of obviousness based on a combination of elements disclosed in the prior art, the Board must articulate the basis on which it concludes that it would have been obvious to make the claimed invention. Id. In practice, this **requires** that the Board "explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious." Id. at 1357-59. This entails consideration of both the "scope and content of the prior art" and "level of ordinary skill in the pertinent art" aspects of the Graham test.

When the Board does not explain the motivation, or the suggestion or teaching, that would have led the skilled artisan at the time of the invention to the claimed combination as a whole, we infer that the Board used hindsight to conclude that the invention was obvious. *Id.* at 1358.

See in re Kahn, 441 F.3d 977 (Fed. Cir. March 22, 2006) (emphasis added).

In this case, the Office Action attempts to show a motivation to combine through "enhancements" that are supposedly found in the references. The mere identification of

"enhancements" to provide a motivation to combine, however, is not enough to establish a prima

facie case of obviousness. In short, a prima facie case of obviousness cannot be established

through unsupported broad statements regarding "enhancements," and then jumping to the

unsupported conclusion that such "enhancements" are obvious because of the benefits of such

"enhancements." Thus, for at least this additional reason, the proposed combination of references

does not render claims 1, 4-10, 13-14, 19, 20-22, and 25-26 unpatentable.

IV. **CONCLUSION** 

As discussed above, the Applicant respectfully submits that the pending claims are

allowable in all respects. Therefore, the Board is respectfully requested to reverse the rejections

of pending claims 1, 4-10, 13-14 and 16-27.

V. PAYMENT OF FEES

The Commissioner is authorized to charge the fee for this appeal brief (\$500), and any

additional fees or credit overpayment to Deposit Account 07-0845.

Respectfully submitted,

Date: July 30, 2007

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#### **CLAIMS APPENDIX**

# (37 C.F.R. § 41.37(c)(1)(viii))

- 1. An imaging system comprising:
- a central processing unit;
- a data storage unit in communication with said central processing unit;
- an imaging device in electrical communication with said central processing unit; and
- a biometric authorization unit in electrical communication with said central processing unit, wherein a user inputs a biometric identifier into said biometric authorization unit in order to enable imaging use of the imaging system, wherein biometric data extracted from the biometric identifier is compared with stored biometric data in said data storage unit, wherein the stored biometric data is associated with stored personal identification information, wherein the stored biometric data and the stored personal identification information are stored after an initial registration, and wherein user preference information is associated with the stored biometric data and with the personal identification information.
- 4. The imaging system of claim 2, wherein imaging use of the imaging system is allowed when a match exists between the biometric data extracted from the biometric identifier and the stored biometric data.
- 5. The imaging system of claim 1, wherein information regarding the use of the imaging system by the user is stored in said data storage unit.

- 6. The imaging system of claim 1, wherein the imaging device is an ultrasound probe and the imaging system is an ultrasound imaging system.
- 7. The imaging system of claim 1, wherein the imaging system is a medical imaging system including one of a Computed Tomography (CT), X-ray, Positron Emission Tomography (PET), Single Photon Emission Computed Tomography (SPECT), Electron Beam Tomography (EBT), Magnetic Resonance (MR), and image-guided surgery system.
- 8. The imaging system of claim 1, wherein the biometric identifier is at least one of a fingerprint, handprint, voice, iris, retina, and facial thermogram.
- 9. The imaging system of claim 1, wherein the medical imaging system is networked into at least one other imaging system.
- 10. A medical imaging network comprising a plurality of medical imaging systems in communication with one another, each of said medical imaging systems comprising:
  - a medical imaging device; and
- a biometric authorization unit, wherein a user inputs a biometric identifier into said biometric authorization unit in order to use the medical imaging device to image a patient; and
- a central management station in communication with each of said plurality of medical imaging systems, wherein biometric data extracted from the biometric identifier is stored in at least one of a central data storage unit in said central management station and individual data

storage units in said plurality of imaging systems, wherein personal identification information and user preference information is associated with the stored biometric data.

- 13. The medical imaging network of claim 11, wherein use information, including at least one of user identity, time, and length of an imaging session at each of said plurality of imaging systems is stored within at least one of said central management station and any of said plurality of imaging systems.
- 14. The medical imaging network of claim 11, wherein a user initially registers at one of said central management station and one of said plurality of imaging systems.
- 16. The medical imaging network of claim 10, wherein at least one of said plurality of imaging devices is an ultrasound probe.
- 17. The medical imaging network of claim 10, wherein each of said plurality of imaging systems is one of a Computed Tomography (CT), X-ray, Positron Emission Tomography (PET), Single Photon Emission Computed Tomography (SPECT), Electron Beam Tomography (EBT), Magnetic Resonance (MR), and image-guided surgery system.
- 18. The medical imaging network of claim 10, wherein the biometric identifier is at least one of a fingerprint, handprint, voice, iris, retina, and facial thermogram.

- 19. A method of using a medical imaging system comprising: registering to use the medical imaging system, said registering comprising:
  - (i) inputting a biometric identifier into a biometric authorization unit;
  - (ii) inputting personal information into the medical imaging system; and
- (iii) associating biometric data extracted from the biometric identifier with the personal information; and

storing the biometric data and associated personal information;

enabling imaging use of the medical imaging system when biometric data input at the biometric authorization unit matches stored biometric data.

- 20. The method of claim 19, further comprising storing individual imaging preferences for the medical imaging system as user preference information and associating the user preference information with the biometric data and the personal information.
- 21. The method of claim 19, further comprising allowing said registering step by inputting a password.
- 22. The method of claim 19, wherein the medical imaging system is one of an ultrasound, Computed Tomography (CT), X-ray, Positron Emission Tomography (PET), Single Photon Emission Computed Tomography (SPECT), Electron Beam Tomography (EBT), Magnetic Resonance (MR), and image-guided surgery system.

- 23. The method of claim 19, wherein the biometric identifier is at least one of a fingerprint, handprint, voice, iris, retina, and facial thermogram.
  - 24. A method of using audio/video equipment comprising:

registering to use the audio/video equipment by inputting biometric data;

storing the biometric data; and

enabling audio/video use of the audio/video equipment when biometric data input after said registering matches the stored biometric data.

- 25. The method of claim 24, further comprising restricting access to said registering step by requiring submission of a password.
- 26. The method of claim 24, wherein the audio/video equipment is a medical imaging system comprising one of an ultrasound, Computed Tomography (CT), X-ray, Positron Emission Tomography (PET), Single Photon Emission Computed Tomography (SPECT), Electron Beam Tomography (EBT), Magnetic Resonance (MR), and image-guided surgery system.
- 27. The method of claim 24, wherein the audio/video equipment is one of a television, camera, CD player, DVD player, and car stereo.

## **EVIDENCE APPENDIX**

# (37 C.F.R. § 41.37(c)(1)(ix))

- (1) United States Patent No. 6,129,671 ("Hastings"), entered into record in Office Action mailed February 21, 2007.
- (2) United States Patent No. 6,587,830 ("Singer"), entered into record in Office Action mailed February 21, 2007
- (3) United States Patent No. 5,315,999 ("Kinicki"), entered into record in Office Action mailed February 21, 2007.
- (4) United States Patent No. 5,930,804 ("Yu"), entered into record in Office Action mailed February 21, 2007.
- (5) United States Patent No. 6,260,021 ("Wong"), entered into record in Office Action mailed February 21, 2007.

# RELATED PROCEEDINGS APPENDIX

(37 C.F.R. § 41.37(c)(1)(x))

Not Applicable.